WHAT IS CLAIMED IS:

1. A telephony system, comprising:

a first voice processing module;

a second voice processing module;

a host processor coupled to said first and second voice processing modules; and

a buffer coupled to said first voice processing module, said second voice processing module, and said host processor;

wherein said first voice processing module is adapted to receive first digital voice signals from any one of a first plurality of subscriber lines, to compress said first digital voice signals to generate a first voice packet, and to transfer said first voice packet to said buffer,

wherein said second voice processing module is adapted to receive second digital voice signals from any one of a second plurality of subscriber lines, to compress said second digital voice signals to generate a second voice packet, and to transfer said second voice packet to said buffer; and

wherein said host processor is adapted to assemble a packet comprising said first voice packet and said second voice packet and to transmit said assembled packet for delivery over a data network.

2. The telephony system of claim 1, wherein said first voice processing module and said second voice processing module are further adapted to generate said first voice packet and said second voice packet in parallel.

3. The telephony system of claim 1, wherein said host processor is adapted to transmit said assembled packet for delivery over an HFC network.

4. The telephony system of claim 3, wherein said host processor is adapted to transmit said assembled packet for delivery over an HFC network during an assigned upstream burst opportunity.

5. The telephony system of claim 1, wherein said first voice processing module and said second voice processing module each comprise a digital signal processor.

6. The telephony system of claim 1, further comprising:

a first audio processing module coupled to said first voice processing module; and

a second audio processing module coupled to said second voice processing module;

wherein said first audio processing module is adapted to receive first analog voice signals from any one of said first plurality of subscriber lines and to convert said first analog voice signals into said first digital voice signals, and

wherein said second audio processing module is adapted to receive second analog voice signals from any one of said second plurality of subscriber lines and to convert said second analog voice signals into said second digital voice signals.

7. The telephony system of claim 6, further comprising:

a first plurality of subscriber line interface circuits coupled to said first audio processing module; and

a second plurality of subscriber line interface circuits coupled to said second audio processing module;

wherein each one of said first plurality of subscriber line interface circuits is adapted to transmit analog voice signals from one of said first plurality of subscriber lines; and

wherein each one of said second plurality of subscriber line interface circuits is adapted to transmit analog voice signals from one of said second plurality of subscriber lines.

8. The telephony system of claim 1, wherein said assembled packet comprises physical layer overhead, media access layer overhead, said first voice packet and said second voice packet.

9. A telephony system comprising:

a cable modem device, including a cable modem, a host processor and a buffer;

a first processing module coupled to said cable modem device, wherein said first processing module includes a first voice processing module; and

a second processing module coupled to said cable modem device, wherein said second processing module includes a second voice processing module;

wherein said first voice processing module within said first processing module is adapted to receive first digital voice signals from any one of a first plurality of subscriber lines, to compress said first digital voice signals to generate a first voice packet, and to transfer said first voice packet to said buffer in said cable modem device,

wherein said second voice processing module within said second processing module is adapted to receive second digital voice signals from any one of a second plurality of subscriber lines, to compress said second digital voice signals to generate a second voice packet, and to transfer said second voice packet to said buffer in said cable modem device; and

wherein said host processor within said cable modem device is adapted to assemble a packet comprising said first voice packet and said second voice packet and wherein said cable modem within said cable modem device is adapted to transmit said assembled packet for delivery over a data network.

10. The telephony system of claim 9, wherein said first voice processing module within said first processing module and said second voice processing module within said second processing module are further adapted to generate said first voice packet and said second voice packet in parallel.

11. The telephony system of claim 9, wherein said first voice processing module within said first processing module and said second voice processing module within said second processing module each comprise a digital signal processor.

12. The telephony system of claim 9, wherein said first processing module further comprises a first audio processing module coupled to said first voice processing module;

wherein said second processing module further comprises a second audio processing module coupled to said second voice processing module;

wherein said first audio processing module is adapted to receive first analog voice signals from any one of said first plurality of subscriber lines and to convert said first analog voice signals into said first digital voice signals; and

wherein said second audio processing module is adapted to receive second analog voice signals from any one of said second plurality of subscriber lines and to convert said second analog voice signals into said second digital voice signals.

13. The telephony system of claim 12, further comprising:

a first plurality of subscriber line interface circuits coupled to said first audio processing module; and

a second plurality of subscriber line interface circuits coupled to said second audio processing module;

wherein each one of said first plurality of subscriber line interface circuits is adapted to transmit analog voice signals from one of said first plurality of subscriber lines; and

wherein each one of said second plurality of subscriber line interface circuits is adapted to transmit analog voice signals from one of said second plurality of subscriber lines.

14. The telephony system of claim 9, wherein said assembled packet comprises physical layer overhead, media access layer overhead, said first voice packet and said seeond voice packet.

15. A method for reducing delay in a telephony system, comprising:

receiving first digital voice signals from one of a first plurality of subscriber lines;

receiving second digital signals from one of a second plurality of subscriber lines;

compressing said first digital voice signals using a first voice processing module to generate a first voice packet;

compressing said second digital voice signals using a second voice processing module to generate a second voice packet;

transferring said first voice packet to a buffer;

transferring said second voice packet to a buffer;

assembling a packet comprising said first voice packet and said second voice packet; and

transmitting said assembled packet for delivery over a data network.

16. The method of claim 15, wherein said compressing said first digital voice signals and said compressing said second digital voice signals are carried out in parallel.

17. The method of claim 15, wherein said transmitting said assembled packet for delivery over a data network comprises transmitting said assembled packet for delivery over an HFC network.

18. The method of claim 15, wherein said transmitting said assembled packet for delivery over an HFC network comprises transmitting said assembled packet for delivery over an HFC network during an assigned upstream burst opportunity.

19. The method of claim 15, wherein said first voice processing module and said second voice processing module each comprise a digital signal processor.

20. The method of claim 15, further comprising:

receiving first analog voice signals from one of said first plurality of subscriber lines;

receiving second analog signals from one of said second plurality of subscriber lines;

converting said first analog voice signals into said first digital voice signals; and

converting said second analog signals into said first digital voice signals.

21. The method of claim 20, wherein said receiving said first analog voice signals from one of said first plurality of subscriber lines comprises receiving said first analog voice signals from one of said first plurality of subscriber lines via a first subscriber line interface circuit; and

wherein said receiving said second analog voice signals from one of said second plurality of subscriber lines comprises receiving said second analog voice signals from one of said second plurality of subscriber lines via a second subscriber line interface circuit.

22. The method of claim 15, wherein said assembled packet comprises physical layer overhead, media access layer overhead, said first voice packet and said second voice packet.

23. The method of claim 15, wherein said transferring said first voice packet to a buffer comprises performing a first DMA transfer and wherein said transferring said second voice packet to a buffer comprises performing a second DMA transfer.

24. The method of claim 15, wherein said first DMA transfer and said second DMA transfer are segmented DMA transfers.